Volkswagen

North American International Auto Show – Detroit 2017

I.D. BUZZ – world premiere

Note:

This press kit as well as images and videos on the I.D. BUZZ are available online at www.volkswagen-media-services.com. User ID: vwidbuzz; Password: naias2017.

Features and technical data of production models apply to models offered in Germany. Details for other countries may vary.

All performance levels, fuel efficiency and emission figures given in this press release are forecast figures as of January 2017.

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Volkswagen presents I.D. BUZZ in Detroit

Electric van has a driving range of up to 600 kilometers / 270 miles and seats eight people

Versatile zero-emission all-wheel drive vehicle transfers a Microbus feeling into the future

Key facts – the I.D. BUZZ in keywords

1. More safety and comfort: the I.D. BUZZ concept vehicle is the first fully autonomously driving van with an electric drive.
2. The distances of today's gasoline-powered cars: up to 600 kilometers, or 270 miles (AER driving range).
3. Makes statement about a new era of drive systems. Design of I.D. BUZZ gives electric mobility a new face.
4. Two luggage compartments and maximum flexibility: thanks to electric drive system I.D. BUZZ is a space wonder with seating for up to eight.
5. Focus on people: in the fully autonomous "I.D. Pilot" driving mode, the driver's seat can be turned 180 degrees to face the rear.
6. Traction in any terrain: electric all-wheel drive with two motors and 275 kW / 374 PS of system power.
7. Icon of a new era: concept vehicle carries Microbus feeling over to the future.
8. Optimally in driver's visual field: Head-up Display projects information via augmented reality.
9. Steering wheel with capacitive touchpad is now the touch-sensitive steering wheel: the van's main functions are controlled from the steering wheel.
10. Can also be used outside of the I.D. BUZZ: flexible center console with tablet display and Bluetooth loudspeakers from Beats.

I.D. BUZZ – world premiere of zero-emission van in Detroit

Wolfsburg / Detroit, January 2017. The era of electric mobility has begun. And Volkswagen will be shaping it: with the I.D. BUZZ that Volkswagen is now presenting at the North American International Auto Show (NAIAS, January 8 - 22) in Detroit – a Microbus of a new era. In its design, the electric concept van forges links between the legendary origins of the Volkswagen brand and its electrifying future. The I.D. BUZZ, like the I.D., is another new Volkswagen vehicle that will give a face to electric mobility. These are cars whose thoroughly clear design reflects a transformation – of the brand and its models. Dr. Herbert Diess, Chairman of the Board of Management for the Volkswagen brand: "The Volkswagen brand's big electric offensive begins in the year 2020 with a completely new vehicle architecture. That is when we will be launching an entirely new generation of fully connected, all-electric vehicles on the market. By 2025 we want to be selling one million of these vehicles annually. We are making electric mobility the new trademark of Volkswagen."

Volkswagen is showing just how multifaceted the electric mobility of tomorrow could be in Detroit with the I.D. BUZZ concept vehicle – a space wonder with all-wheel drive, electric motors at the front and rear axles, a fully-autonomous driving mode ("I.D. Pilot") and a new generation of display elements and controls.

New bus, new name. The name "I.D. BUZZ" is indeed a made-up word, but it was hardly an arbitrary choice. I.D. stands for "Identity," "Idea," "Individual," "Intelligent" and "Iconic Design". BUZZ, on the other hand, is a phonetic word play on "bus" and refers to the silent "buzzing" of the drive system.

This all fits in perfectly with the technologically progressive and design-focused concept of the concept vehicle.

Travel up to 600 kilometers. Charge while drinking a cappuccino. Then the journey continues.

First autonomously driving van. "The I.D. BUZZ is a van of the next generation. It is based on the new Modular Electric Drive Kit (MEB), and it offers comfort and plenty of space for travel. Its NEDC electric driving range is up to 600 kilometers (270 miles / AER) ," says Dr. Frank Welsch, Volkswagen Member of the Board of Management responsible for Development. The I.D. BUZZ is recharged with energy either inductively or at a charging station. It takes less than 30 minutes to charge the battery to 80 percent capacity at a charging power of 150 kW. Dr. Welsch continues: "The overall concept of the I.D. BUZZ points the way to the future. This concept vehicle is the world's first multi-variable electric van to be equipped with a fully autonomous driving mode. It carries the feeling of freedom of the Microbus over to a completely new era of mobility."

As a vehicle of a new era, the I.D. BUZZ does in fact conceptually redefine the parameters of "drive system", "space" and "comfort". Some facts that showcase this:

- Extremely long wheelbase of 3,300 mm.
- Front body structure which, along with offering top safety properties, also enables a wide turning angle of the front wheels and – in combination with the steerable rear axle – a very small turning circle of less than 11 meters.
- Low-profile lithium-ion battery integrated in the floor reinforces the basic vehicle structure, lowers the vehicle's

center of gravity, produces ideal axle load distribution and low lateral acceleration.

- Front suspension has stiff, decoupled subframe and integrated all-wheel drive.
- Multi-link rear suspension has integrated drive unit and decoupled subframe at rear axle.
- Suspension layout offers optimal handling and ideal acoustics.
- Air suspension at the rear axle and electronically controlled dampers at both axles deliver maximum comfort.
- Wheels 780 mm in diameter and 235/45 R22 tires offer optimal ride comfort.

“I.D. Pilot” driving mode offers outlook on the year 2025

Fully autonomous driving functionality. It has been just four months since Volkswagen presented a smaller sibling of the I.D. BUZZ at the Paris International Motor Show: the I.D. It too was revolutionary – a compact electric car that will launch in 2020 with driving ranges of up to 600 kilometers: it is the first car based on the MEB that will go into production, and the first Volkswagen concept car that can drive fully autonomously. The new I.D. BUZZ is now the first van to fully enable this functionality: a slight push on the steering wheel is all it takes to make the steering wheel retract to merge into the cockpit instrument panel and switch the I.D. BUZZ over from manual control to the fully autonomous “I.D. Pilot” mode (conceivable starting in 2025). In this mode, the steering wheel is decoupled from the steering gear via a newly developed steering column system. Then driver will be able to turn their seats towards the rear, facing their fellow travelers. Laser scanners, ultrasonic sensors, radar sensors, area view cameras and front camera

acquire information about the surroundings, and other traffic data is received via the cloud.

Information is projected into virtual space by augmented reality

Navigation with virtual symbols in a real space. The classic cockpit no longer exists in the I.D. BUZZ. In its place, the van uses its AR Head-up Display to project key information into the driver's visual field – that is, onto the road in 3D. AR stands for Augmented Reality, a technology that shows electronically generated images in real space. Other information is displayed on a tablet; features such as infotainment and climate control functions are operated via this portable tablet. There are also capacitive touchpad panels in the four door trim panels and outside of the third seat row. They are used to individually control functions such as those of the six-zone climate control system.

Steering wheel becomes touch-sensitive steering wheel. The key controls for driving are located on the steering wheel. Its inner area is not equipped with the spokes or button switches that are usual these days. Instead, it has a type of touchpad with capacitive sensor arrays – which turns the classic steering wheel into a multifunction touch-sensitive steering wheel.

Space for up to eight persons and all sorts of bikes and boards

An all-round vehicle for a new era. Space utilization of the concept vehicle with space for up to eight persons is better than in any other electric vehicle. An excursion with two families over the weekend? With the I.D. BUZZ this is no problem. A gig with the band in another city? No problem. A

vacation trip with bikes and boards? No problem. Driving to a business meeting with colleagues who need to prepare on the way? This too is no problem with the multi-variable seating layout and interactive networking of the I.D. BUZZ. Thanks to the extended MEB-XL platform, this concept vehicle – 4,942 mm long, 1,976 mm wide and 1,963 mm tall – offers extraordinary space dimensions for its class inside too.

Silent Running. Nonetheless, the I.D. BUZZ is not only a space giant. Its technical concept makes it one of the world's most comfortable cars. A silent drive system. An extremely long wheelbase of 3,300 mm. In between, the battery is mounted in the vehicle floor. It lowers the vehicle's center of gravity and delivers ideal weight distribution. The suspension of the I.D. BUZZ with its electronically controlled dampers also delivers premium class comfort.

Clean dynamics with drive torque from two motors

The I.D. BUZZ is dynamic and can be charged quickly. The zero-emission all-wheel drive system with its system power of 275 kW / 374 PS is a perfect fit for the dynamic character of the I.D. BUZZ. One electric motor at the front axle and one at the rear each deliver a power output of 150 kW. The power is distributed between the two axles by an "electric propshaft". The version of the I.D. BUZZ being presented in Detroit with this drive system can accelerate to 100 km/h (62 mph) in around 5 seconds; its top speed is governed to 160 km/h (99 mph). The van's battery (energy capacity: up to 111 kWh) can be charged to 80 percent of its capacity within 30 minutes (with the Combined Charging System (CCS) or through the inductive charging interface and a charging power of 150 kW).

As an alternative, the battery can be charged from any conventional household outlet and at charging stations. The configuration with all-wheel drive is just one of several conceivable versions. Thanks to the MEB, it would be just as easy to equip the I.D. BUZZ with a rear-wheel drive producing up to 200 kW of power and a somewhat smaller battery with a capacity of 83 kWh, for instance, depending on the region and purpose of use.

Electric mobility is given a charismatic face with the I.D. BUZZ

Volkswagen concept vehicle transfers Microbus design to the future

Space for up to eight persons and all sorts of bikes and boards

"I.D. Pilot" autonomous driving mode of the I.D. BUZZ offers outlook on the year 2025

Brand strategy – "We make the future real."

Wolfsburg / Detroit, January 2017. The I.D. BUZZ zero-emission van being presented in Michigan conceptually follows the new Volkswagen brand strategy. Its claim: "We make the future real." Four fields of innovation form the basis for this strategy: Connected Community, Intuitive Usability, Automated Driving and Smart Sustainability. The I.D. BUZZ concept vehicle was developed based on these fields of innovation. They stand for:

- **Connected Community** – In the future, Volkswagen will interconnect humans, cars and the environment with a Volkswagen user identity.
- **Intuitive Usability** – Volkswagen is focusing on cars that are intuitive to operate and feature new display and control concepts.
- **Automated Driving** – Volkswagen will make cars even safer and more comfortable by means of autonomous driving.
- **Smart Sustainability** – Volkswagen is advancing the development of innovative high-volume electric car models.

Iconic Design – innovative electric mobility gets a new face

Microbus is a legend in the USA and Europe. Conceptual and technical product innovations – regardless of their subject area – are inconceivable without a design that is just as innovative. Therefore, Volkswagen is re-interpreting an iconic form of automotive design in the I.D. BUZZ: that of a van. In all likelihood the most familiar van design is that of the Volkswagen icon that took on the unofficial name VW Bus – a vehicle of many names. The Germans call the talented all-round bus the Bulli, North Americans refer to it as the Microbus.

A global community. The odds are high that anyone who parks their bus anywhere between London and Lisbon in Europe is also always part of a community. The same is also true in the USA. Especially in Pacific hotspots like San Francisco, Santa Barbara and San Diego, there are parking areas teeming with vehicles from the older Microbus generations. Although the I.D. BUZZ is a new era van, it would mix in perfectly with its predecessors.

Back from the future. Klaus Bischoff, Volkswagen Head of Design: "In the I.D. BUZZ we have not created a retro design on 22-inch wheels; rather, we have taken the logical next step forward in development by coming up with what is in all likelihood the most successful van design in the world. The entire design is extremely clean with its homogeneous, clean surfaces and monolithic silhouette." Oliver Stefani, Head of Volkswagen Exterior Design also sees it precisely like this: "The I.D. BUZZ is a vision of the original Volkswagen van projected into the future. But it retains some of the influential style elements that are familiar and enjoyed by Volkswagen drivers around the globe." Klaus Bischoff adds: "The future and origins

of Volkswagen design DNA combine here to create a new icon."

High-tech front end. The best example of the interplay of familiar and new elements of the DNA chain is the front end with its characteristic 'V' and the very likeable 'face' – clearly a Bulli, or Microbus, but a completely new interpretation of it. Oliver Stefani: "Instead of the round headlights used in the original model, in designing the I.D. BUZZ we opted for slender LED systems, which not only turn night into day, but also interactively communicate – as eyes – with drivers and pedestrians." Similar to the I.D., the bumpers also integrate a honeycomb design of matte aluminum; the outer honeycomb sections are illuminated.

Every detail re-interpreted. Also defining its style are the extremely short and concise body overhangs. This applies equally to the roofline with its charismatic front overhang and three stylized air vent slots in the rear roof pillars – a small tribute to the legendary T1. Each detail has, however, been re-interpreted and implemented in a new context.

Wrap-around ambient lights. A visually important feature and an expression of special attention to detail is the wrap-around ambient lighting that is basically the 'chrome trim' of a new era. It is actually an accent strip made of matte aluminum, but it is embedded in an 'undercut'. Designers call this a sharp undercut. Indirect ambient lighting has been integrated into this full wrap-around undercut, which also forms the 'V' of the front hood. When it is dark outside, this creates a unique night design together with the two VW logos (front and rear) that are also backlit and the lighting elements in the front bumpers.

Charismatic rear design. The I.D. BUZZ is also unmistakable from a rear perspective. Here the slender full-LED lights and large painted surfaces make up the iconic design. Striking: the tailgate that extends far down into the bumper and the resulting low load sill height of just 600 mm. Incidentally, thanks to its compact electric drive, the I.D. BUZZ not only offers a rear luggage compartment (660 to 4,600 liters), but also one in front (200 liters). All of the lids and doors feature a power opening function. Opening of the tailgate, front doors and rear sliding doors is initiated by a sensor solution from outside the vehicle. Thanks to the Digital Key, all the user needs to do is hold his or her hand over a marked area for entry.

Insignia of electric mobility. There are clear design parallels to the I.D. shown in Paris. The front LED lights, wrap-around LED tail lights, bumpers homogeneously integrated into the body, side sills stylistically raised at the center of the door area, laser scanners on the roof and the look of alloy wheels – all of these elements combine to form the design insignia of the new Volkswagen electric mobility.

Two-tone paint as tribute to the T1 icon. There is hardly any other car in the world on which classic two-tone paint looks better than on the Bulli / Microbus. That is why it is a 'must' for the new I.D. BUZZ as well. The car is painted in Silver Metallic above the concise seam that integrates ambient lighting. The surfaces beneath are painted in Cyber Yellow Pearl Effect. The yellow hue is also found on the sidewalls of the tires (235/45 R22). The 22-inch alloy wheels are painted in Galvano Gray Metallic.

Light as a means of communication. On both sides of the Atlantic, the I.D. BUZZ communicates with its surroundings via

the LED lighting at the front end. The LED light of the headlights interactively mimics the gestures of the human eye (interactive spotlight); the headlights thereby interact with other traffic participants. The concept vehicle masters these light scenarios:

- **Parking.** When all systems of the I.D. BUZZ are shut down it looks from the front as if its "eyes" are closed. When the I.D. BUZZ is parked, just a narrow, small LED strip is visible in the headlights.
- **Opening.** When the I.D. is "awakened", it greets its driver and passengers with a 360° light show. First, the Volkswagen logos (at the front end and in the trunk lid) light up. This is followed by the wrap-around ambient lighting. In the final phase of this light show, the I.D. BUZZ opens its "eyes".
- **Driving.** The Volkswagen logos, wrap-round ambient lighting and daytime running lights that consist of LED strips and the LED headlights are always active while driving. As the car accelerates, the "eyes" adjust to the higher speed by adopting a more dynamic light signature.
- **Automated.** A distinctive feature of the fully autonomous driving mode is that the laser scanners in the roof are now extended and illuminated. As the car speeds up, the LED "eyes" also look ahead in this mode, giving the car a sportier appearance.
- **Interaction.** In addition, the "eyes" are interactive in the fully autonomous driving mode. If the I.D. BUZZ wants to turn, for instance, the LED headlights look in the direction the car is going to turn. What is more, if the van detects people at the side of the road it looks at them. By this type of interaction, the Volkswagen van alerts pedestrians and cyclists to its presence.

Connected Community – the Volkswagen User-ID

.D. knows who will be at the wheel today. The idea is that in the future anyone who drives a Volkswagen will get their own Volkswagen User-ID. The User-ID is an individual profile that stores the personal seat and air conditioning settings, favorite radio stations and songs, sound system settings, exterior sound, configuration of the navigation system, type of ambient lighting and contact information on the driver's friends and business associates. This profile can be retrieved securely via a cloud. Consequently, the I.D. BUZZ also recognizes via the authorized user's smartphone – the Digital Key – which person is entering the car or wants to take the steering wheel at any given time. As soon as a person approaches the van, the sensor surfaces for opening the door light up. If the person's hand is very close to the surface, that individual door is opened. Using the Volkswagen User-ID and a relevant smartphone app, passengers in the vehicle can also control information and entertainment functions and input intermediate destinations into the navigation system. The travel route taken is shown on a tablet (for more information, see page 19).

Intuitive Usability – interior design like a lounge space

A focus on people. "The design of the van concept places people at the center of focus; it should appeal to them and invite them to come in," is how Klaus Bischoff describes it. Awaiting them there is an interior that combines the world of the automobile with the atmosphere of a lounge space. Tomasz Bachorski, Head of Interior Design of the Volkswagen brand, explains the next development phase for the interior: "From now on, we will even be networking the vehicle much more intensively to make it more interactive and to liven up

this space that is shared by friends and family. The interior will become a sort of living room. A mobile place to feel at home. And this is exactly where we are going with the overall interior concept." There are therefore no longer any classic instruments or controls, for instance; employed in their place is an intuitively operated alliance consisting of:

- **Touch-sensitive steering wheel** (multifunction steering wheel with capacitive surfaces),
- **AR Head-up Display** and
- **Center console tablet** (also in the rear seating area and can be used outside of the car).

In the "I.D. Pilot" mode, the front seats can be electrically unlatched and rotated so that they face the rear. Beforehand, the entire multifunctional center console – the "I.D. Box" – moves rearward. All other seating places can also be used flexibly.

Flexible seat layout. The seating system is also flexibly designed to be like the living space at home or a lounge space. This variability is based on the seat rail system that is integrated in the flat floor and on the adjustable and folding seats that are typical of Volkswagen vans. Some examples of variable use: The seatbacks of the individual second row seats can be folded to form tables. At stops, the third seat row can be made into a bed with just a few hand motions. Rest breaks and picnics take on a new quality. This also enables use of the I.D. BUZZ for overnighting. When the trip is resumed, clever detailed solutions make travel more pleasant. For instance, there are the softly padded side sun visors at the rear – they can be moved and are designed so that a passenger can lean on them. Individually placeable cushions also underscore the cozy atmosphere of the interior, which is flooded with light

thanks to the large window areas and two-part panoramic roof.

Stylish interior. The warm interior colors are in keeping with its lounge space character. For instance, the dashpad in front of the driver and front passenger exhibits a color transition from Magnet Metallic to Moon White Metallic, and the dashpad and door panel structures that are interspersed with a honeycomb pattern are also illuminated by the ambient lighting. Sophisticated and stylish details are a common theme in the interior concept.

- **Wood floor.** The floor is made of fine birch wood (Silver Birch). The bright and friendly birch color underscores the cozy character of the interior. In the rear seating area, aluminum inlays in the wood take up the honeycomb pattern of the dashpad and touch-sensitive steering wheel as well as the front bumper.
- **Door trim.** The top sections of the doors are covered with durable, sophisticated metallic artificial leather which features a gentle curve in the front area. The interplay of color is underscored by the transition from the darker driver's area to the bright comfort zone at the rear – the cocooning area. The designers have upgraded the lower sections of the door trim panels with a creme-colored knitted fabric that is used throughout the rear seating area. The interior design and materials used reflect a successful synthesis of innovative design and a youthful character.
- **Seat fabrics.** An innovative knit fabric that features a graduated honeycomb pattern which is perfectly coordinated with the seats makes the design very sophisticated. The refined knitting technique used to

produce the individual diamond shapes lets a light metallic background material show through. Thanks to its high elasticity, the material conforms excellently to the seat shape. Accentuated details in yellow such as piping and seat belts with yellow-beige color transitions showcase the contemporary and fresh look of the I.D. BUZZ and also create a connection between exterior and interior.

Starting and stopping scenario. As soon as the driver's seat is occupied, the steering wheel, which is retracted into the dashpad in parking mode, extends out, and the indicators and buttons on the steering wheel light up simultaneously. In parallel, the I.D. BUZZ activates the AR Head-up Display and the tablet in the "I.D. Box". The ambient lighting also greets the driver with a welcome scenario. Close the doors, buckle up, press the brake pedal and select the driving gear – and the I.D. BUZZ is immediately ready to start off; there is no longer any engine start/stop button. The concept car is shut off by the "P" button on the steering wheel. When that is done, the steering wheel retracts flush into the cockpit panel.

Steering wheel becomes touch-sensitive steering wheel. The steering wheel of the I.D. BUZZ does not have any spokes, rather it has a completely enclosed form. The wheel – which is trimmed with Nappa leather on its outer borders – is becoming more and more of an interactive touchpad. A new concept has been created here: the touch-sensitive steering wheel. Via touch-sensitive areas on its surface, the driver can operate the driving positions (P, R, N and D), turn signals and various menu functions as well as settings for the AR Head-up Display. The outer region of the touchpad has a honeycomb-like light signature. The same is true of the dashpad in front of the driver and front passenger. Pressing on the illuminated VW logo in

the middle of the touch-sensitive steering wheel initiates a switch between the “Drive” mode and “I.D. Pilot” mode; the steering wheel then retracts or extends accordingly. When the touch-sensitive steering wheel is extended, i.e. in “Drive” mode, it is possible to look along the steering column and to the front of the car; a transparent look that makes the interior appear even airier.

Multifunctional “I.D. Box” with Beats loudspeakers. The “I.D. Box” is a perfect fit for the character of the I.D. BUZZ. When the van is being driven by the driver, the I.D. Box is positioned in front between the seats. In this case, the tablet integrated into the console is positioned to serve as a display and control element for the driver and front passenger. The I.D. Box is also equipped with loudspeakers from Beats, which are interconnected with the smartphones on board and the sound system of the I.D. BUZZ via Bluetooth. When the driver switches to the “I.D. Pilot” mode, the entire I.D. Box moves towards the rear. Other console features include cup holders and a folding table. The center console (like the Beats speakers) is easy to unsnap and remove from the vehicle. This makes it the ideal package for taking a break from driving at the beach or anywhere else.

Tablet as interactive platform. As mentioned, the Volkswagen I.D. lets the I.D. BUZZ know who the driver is. The individual vehicle settings are configured accordingly, and features such as the person’s calendar are shown on the tablet. The I.D. BUZZ also knows the friends of the driver via the Volkswagen I.D. Based on this information, the car might recommend meeting with friends or activities that would fit ideally into the timing for the day. In the “I.D. Pilot” autonomous mode, the system informs the driver on the tablet about changes to the calendar,

for instance. That is not all: if the I.D. BUZZ passes by one of the driver's favorite shops or a favorite restaurant, the car informs the driver on the tablet about the current offerings of these personal points of interest. This information can be hidden by a finger swipe, perhaps in order to start a game or a movie. To sum it up: a new era of interactive and personalized online services is beginning with the I.D. BUZZ.

AR-Head-up Display gives driving instructions. The large I.D. BUZZ, like the compact I.D., is equipped with an AR Head-up Display. AR stands for Augmented Reality. Information such as the directions given by the navigation system is projected as virtual images from 7 to 15 meters ahead of the car. The effect is astonishingly realistic. Direction arrows are projected via augmented reality to show exactly where the driver is heading with the van. Thanks to the AR-Head-up Display, the navigation instructions – which were originally limited to a display located in the instrument cluster – are now part of three-dimensional surroundings that the driver can experience. Drivers can use the touch-sensitive steering wheel to modify the type and amount of information shown, adapting the system to their individual needs. Three levels of information density are available here:

- Level 1: "Navigation," "Speed" and "Battery indicator"
- Level 2: level 1 plus "Phone" (in "Drive" mode) and "Local offerings" (in "I.D. Pilot" mode)
- Level 3: levels 1 and 2 plus "Friends" along the route (in "Drive" mode) and "Messages" (in "I.D. Pilot" mode)

e-Mirror instead of conventional mirror. There are no rearview mirrors in the I.D. BUZZ. Cameras and a display have taken over their job. At the usual location of the rearview mirror, there is a screen which looks exactly like a rearview mirror and performs

its function: the e-Mirror. A monitor here combines the data from three external cameras. The images are transmitted from the exterior mirror cameras on the left and right sides of the car body and from a camera that faces directly rearward. Doing away with the side mirrors improves aerodynamics.

Interactive ambient lighting. The lighting mood of the interior also changes according to the mode. In "Drive" mode, all illuminated elements are lit in a white tone. When the driver activates the "I.D. Pilot" mode, they switch over to a warm mood color. In addition, the ambient lighting and touch-sensitive steering wheel assume warning and indicator functionalities. Consider "Drive" mode, for example: If the driver wants to change lanes while another vehicle is alongside, a warning light signal is shown on the relevant side of the dashpad. This means that the LED warning indicators of the lane-changing assistant, which are located in the door mirrors in today's vehicles, migrate into the interior where they are even more intuitively perceptible. Example of the "I.D. Pilot" mode: the light signal on the touch-sensitive steering wheel, which in this mode is retracted into the dashpad and thereby fixed, virtually traces the movement of a turning steering wheel.

Automated Driving – I.D. BUZZ in "I.D. Pilot" autonomous driving mode

Activating fully autonomous driving. This is a world premiere – as mentioned, the I.D. BUZZ is the first van that a person can have drive fully autonomously. It is very easy to activate the "I.D. Pilot" mode: as soon as the driver lets go of the steering wheel, the I.D. BUZZ assumes control. The ambient lighting then switches from a white light ("Drive") that facilitates concentration to mood lighting that is warm and relaxed. At

the same time, the distribution of ambient lighting is extended to the rear seating area. Simultaneously, the status of the I.D. BUZZ can be seen at all times on the tablet and the AR Head-up Display.

Four laser scanners on the roof. By this time, the zero-emission van has already activated its laser scanners. Four of them extend from the roof in "I.D. Pilot" mode. The cleanly styled roof sensors call attention to the fully autonomous mode by indirect lighting. The I.D. BUZZ is not only able to detect other road users by its laser sensors, but also with the assistance of ultrasonic sensors, radar sensors, side area view cameras and a front camera. Traffic data is also continually acquired and compared with the vehicle data via the cloud.

Activating manual driving. Fully autonomous mode is deactivated by touching the touch-sensitive steering wheel or by pressing the brake or accelerator pedal.

Smart Sustainability – the Modular Electric Drive Kit (MEB)

MEB changes everything. Like the I.D., the I.D. BUZZ being presented in Detroit is also based on the newly developed Modular Electric Drive Kit (MEB). The future MEB models will be cars that will only be offered with pure electric drive systems. This design approach produces various benefits, in particular with regard to the package – the layout of the powertrain components, ancillary equipment and interior features. The zero-emission all-wheel drive system of the I.D. BUZZ consists primarily of an electric motor (150 kW) at the front axle, an electric motor at the rear axle (150 kW) as well as the power electronics, gearbox, a space-saving high-voltage flat battery mounted under the car floor and the ancillary equipment integrated in the front body. The vehicle's practically silent performance is truly fascinating.